VI

A MEDIEVAL ARMENIAN VIEW OF THE PHYSICAL WORLD: THE COSMOLOGY OF VARDAN AREWELC'I IN HIS CHRONICLE*

The first Armenian historians dealt with themes of immediate interest and importance to their contemporary audience, and with circumscribed periods of time. And since Armenian literature begins only in Christian Armenia, the prime concern of Koriwn, P'awstos, or Agat'angelos was naturally with the origin and development of Christianity in their own country. However, Armenians were familiar with a broad spectrum of scholarship — both Christian texts in Greek and Syriac, and the learning of late classical antiquity — so it is not surprising that succeeding authors soon placed Armenia on a larger stage. The first, and most influential, of these historians was the enigmatic Movses Xorenac'i. He adapted — with enduring success — the surviving oral traditions about early Armenian history to the framework of world history as codified by Eusebius of Caesarea in his Chronicle. After Movsēs it became quite common for an Armenian historian to give a brief resume of early biblical history, to trace the development of nations from Noah's three sons, and to emphasize the antiquity of the Armenians as descendants of Japheth through Torgom 1.

The story of mankind begins with Adam and Eve. According to the book of Genesis they were created on the sixth day. And since — as Movsēs Xorenac'i strongly averred — there is no history without chronology², perhaps it is not unreasonable to place the events of the previous five days within the purview of the historian. Armenian scholars had long been familiar with Christian interpretations of the story of creation (the "hexaemeral" literature), with earlier Greek scientific works dealing with the physical universe, and with Philo's interpretations of Genesis and Exodus. Such investigations might find a place in an historical work — for example, in the *Teaching of Saint Gregory*, the long sermon in the middle of Agat'angelos' account of the conversion of Armenia; or in the defense of Christian doctrine in letters

Additional Note: For Vardan's Chronicle see further below item XIX.

^{*} A small token in affectionate remembrance of Sirarpie Der Nersessian, whose influence thirty years ago led me into a career I would never have anticipated.

¹ E.g. Yovhannes Drasxanakertc'i; T'ovma Arcruni; Asolik.

² M.X., II 82.

reported by Elišē and Łazar, documents which treat of the fundamental elements in nature, amongst other themes. But generally the speculations we might call "science and astronomy" were not included in specifically historical narratives. It was therefore a novelty when Vardan Arewelc'i began his Chronicle — or, to be more accurate, his Historical Compilation [Hawak'umn Patmut'ean] — not with Adam, but with God, and proceeded to describe the creation of the physical world as a prelude to the fall of Adam and Eve from grace and the subsequent sad story of human misfortune.

In his account of the creation of the world Vardan touches on many themes discussed in earlier writers. In what follows I shall try to trace his sources for that first section of his Chronicle — or to be more precise, to discuss his views in the light of earlier Armenian traditions. By "traditions" I mean generally accepted views which might be found in historical works, in homilies, and more general works of theology. I shall not here discuss, except in passing, Armenian renderings of Greek technical works. To such "popular" ideas there are parallels in the introduction to Vardan's brief Geography; and the same themes were addressed a generation later by Mxit'ar Ayrivanec'i in his own Chronicle. But here I shall concentrate on Vardan's Chronicle and confine my comments to sources in published texts. [Since most of the vast mass of Armenian biblical commentaries remain unpublished, I must here omit any reference to Vardan's ideas as expressed in his commentary on Genesis]³.

Vardan begins by discussing the nature and essence of God. When Moses asked God on Mount Horeb: "What shall I say when they ask me his name?" he was told: "I am he who is — Es em astuac or ēn". [Into this passage in Exodus, 3.14, the Armenian introduces the word "God", which is not found in the Hebrew and Greek.] There are two parts to this. "He who is" refers to God's eternal uncreated being;

³ For a general overview of Vardan and his works see the two volumes by P'.P'. ANT'APYAN, *Vardan Arevelc'i*, Erevan, 1987, 1989. Studies on the "technical" texts known or written in Armenia [such as B.E. T'umanyan, *Hay Astlagitut'yan Patmut'yun*, Erevan, 1964] are not relevant to this present enquiry.

Some of the themes discussed below were already raised in the commentary to my translation of the *Chronicle* [DOP, 1989]. Here I wish to expand on their earlier history in Armenian writers. A preliminary version of this article was read in October, 1990, in Bologna at the meeting of the *Association internationale des études arméniennes*. I am grateful to the audience for some comments, and especially to Peter Cowe for his presentation as Respondent.

whereas "God — astuac" refers to his creative activity. Vardan derives the Armenian word from the phrase ast acel, "to bring [into being] here". This is the standard etymology for "God" in Armenian, though it does not seem to be attested before the tenth century⁴. It is found in Xosrov Anjewac'i's Commentary on the Prayers of the Liturgy, and is echoed in Nerses Lambronac'i's more elaborate Commentary on the Liturgy. It is closest to the Greek interpretation for theos derived from tithēmi (to place, put). The other Greek etymologies deriving theos from stems such as: theō (to run), theaomai (to see), aithō (to burn), seem to have no echo in Armenian⁵. The comment attributed to Gregory in the History of Agat'angelos that the pagan gods are hastuack' [i.e. "fabricated"], not astuack', is more of a pun than an etymology. It comes in the midst of numerous tortures, where Gregory taunts Trdat and derides idolatry [§ 71].

Vardan now turns to the fact that God is one. In mathematics the single is the origin of multiplicity and exists without it 6. This argument would be familiar to all Armenians from the very popular introduction to philosophy by David the "Invincible" Philosopher, his Definitions and Divisions of Philosophy. Chapter 14 begins: "... It should also be known that there are two kinds of numbers — even numbers and odd numbers... The common origin for even and odd numbers is one". Anania of Širak attributes this idea to Plato. Likewise, argues Vardan, "He who is" is one and single. But he adds that understanding of the Trinity was not hidden from Moses, the author of the book of Genesis. For he had used the plural form of the verb several times when referring to God's activity — "Let us create... let us go down", etc.

Vardan returns to this theme when discussing the creation of Adam. But here he notes that God is three because he has beginning, middle, and end. This has a close parallel in a mistaken rendering of the Greek in the Armenian version of the pseudo-Aristotelian *De Mundo*. The Armenian states: "[God] is beginning and middle and end, holding all beings". But the Greek original says: "God holds the beginning and end and middle of all beings". The passage is based on Plato's Laws⁷.

⁴ It is first attested in Xosrov Anjewac'i, p. 16. Cf. Nerses Lambronac'i, *Meknut'iwn Xorhrdoc' Pataragin*, p. 349.

⁵ For the Greek sources see LAMPE, Lexicon, s.v. Theos.

⁶ See for example, the Armenian version of DAVID's Definitions and Divisions of Philosophy, ch. 14. Anania attributes this idea to Plato, p. 239.

⁷ Armenian version, p. 542 = 401b25.

There is a parallel in Anania of Širak, who attributes the idea to Philo⁸. But it does not appear in the earliest Armenian sources, such as the *Teaching of Saint Gregory*, where the Trinity is discussed at length. In his *Geography* Vardan elaborates on the Father as begetter, the Son as begotten, and the holy Spirit as emanating from the Father — three Persons and one Nature. But in the *Chronicle* he proceeds immediately to the created world, omitting further discussion of "essence", "nature", or "being", which figure prominently in more theologically oriented works.

God is without distinction, or number, or qualities, says Vardan, yet he is recognized as "good". He did not wish to possess the good solely [for himself], but he made good creatures in order for them to enjoy his own inexhaustible goodness. Later Vardan stresses that God foresaw that this liberal benevolence would be abused and that sin would enter the world. But first he turns to the creative activity of God the "craftsman [aruestawor]" 10. This term does not occur in the Armenian bible; but the Greek equivalent, technitēs, is very common in patristic literature. Later Vardan will return to the theme of aruest, "art of craft", an important concept in the De Mundo.

God did not fashion matter that already existed into something new. Vardan notes that the word "matter [niwt]" does not occur in Genesis, but he passes over the ambiguous statement in Wisdom 11.18 that God's all-powerful hand created this world from "formless matter" [hastateac zašxarhs yankerparan niwt'oy]. The phrase had been echoed in the Teaching 11, and several later authors had discussed the question of creation ex nihilo 12. Vardan explicitly states that God made the form of heaven and earth from nothing [yoč'ēic' ĕnč'ac'oyc']. This terminology derives from Eznik, who was the first to adapt technical Greek vocabulary to Armenian 13. The Armenian version of Basil's Hexaemeron

⁸ P. 240.

⁹ Cf. his Geography, 1.16ff. The theme is too common to note the parallels in theological literature.

¹⁰ See also Grigoris Aršaruni, Hom. 3, Grigor Narekac'i, 63.2.

^{11 § 272.}

¹² See Sarkawag, p. 306ff., for a discussion of form and matter.

¹³ See L. Mariès, "Étude sur quelques noms et verbes d'existence chez Eznik", REArm 8 (1928).

unequivocally states: $ac\ i\ c'goye\ i\ goy^{14}$. However, it is worth pointing out that the Greek original merely says that God brought into being what did not exist. The Armenian version of this influential text has been much studied in recent years, and we now have a good critical edition of the text. But the Armenian was not translated from the original Greek, but rather from an earlier Syriac rendering [preserved in its entirety in only one manuscript]. The Syriac, which is generally expansive, here follows the Greek. So the alteration was introduced by the Armenian translator. The same idea of creation $ex\ nihilo$ is elaborated in greater detail in the Fourth Homily of the $Yacaxapatum\ Cark$.

God began by creating four "principles — skzbuns", which Vardan also calls "elements — tarerk". These are fire, air, water, and earth; which are also defined as "warm, light, cold, and heavy". The notion of these four basic building blocks goes back to Greek antiquity, and is echoed by all Armenian writers who deal with the physical world. Although Vardan takes the idea for granted and does not elaborate on it, we may briefly note some of the earlier Armenian discussion and interpretations.

In the first place, Vardan's term skizbn is not usual. In addition to tarr, which is ubiquitous, one finds most frequently the term niwt'; less common are hiwt' [used by Yovhannes Mandakuni, for example], and yelanak [which is found in the Yačaxapatum Čark]¹⁵. The original term for these four elements in Basil's Hexaemeron is the Greek word stoicheia, which was transliterated as estokse in the Syriac. But the Armenian translator has rendered it by bnut'iwnk', "natures", a term used by Eznik¹⁶. However, that expression was not common in native Armenian writers. The four elements are very frequently listed as pairs in opposition to each other, and in the De Mundo the discussion of opposing qualities is greatly expanded 17.

Biblical justification for these elements could be found; but only in

¹⁴ P. 40; Greek, II 2, 14B. My comments on the Syriac are based on a reading of Sinai, Syriac no. 9. For the fragment in the British Library, Add. 17143, see L.H. Ter-Petrosyan, "Barsel Kesarac'u 'Vec'oreayk'i' hayeren T'argmanut'yan Naxorinakë", *PBH* 102-103 [1983, 2-3], 264-278.

¹⁵ Niwt': Yačaxapatum, Hom. 4, p. 34; Elišē, p. 33; Girk' T'lt'oc', p. 23; Gregory of Narek, 65.2. Hiwt': Yovhannēs Mandakuni, Hom. 26, p. 198. Yelanak: Yačaxapatum, Hom. 4, p. 33.

¹⁶ E.g. § 2.

^{17 § 5,} Armenian text, p. 531.

the Questions on Genesis attributed to Elišē are scriptural parallels adduced for all four. Fire is linked to the angels; wind to God and thunder; water is justified by Judith 9.17 [creator of the waters]; and earth from Gen. 1¹⁸.

Then the number four has significance in and of itself. We are not here concerned with the very many interpretations to be found in Armenian writers of four in a Christian context. Here our interest is rather in the specific parallels with the four elements. These include Eznik's image of the world as a chariot drawn by four horses, all in competition with each other. But they are controlled and made to drive a straight course by God the charioteer. In this passage [§ 3] Eznik was primarily concerned with the single nature of God; but he refers to the four horses as the hot and the cold, the dry and the wet. This idea is also found in the Armenian version of George of Pisidia's Hexaemeron. But it did not become popular in Armenian writers 19. George also compared to the four elements the four columns which support the world — an important theme in Psalm 74, to be discussed later. [In the King James version, 75.3: "The earth and all the inhabitants thereof are dissolved: I bear up the pillars of it".]

Gregory of Narek compared the four elements to the four points of the cross. The theme of the cross is very prominent in Armenian, first being elaborated in the *Teaching of Saint Gregory*; and numerous theological interpretations are given to the directions in which the arms of the cross point. But only in Gregory of Narek have I found the elements adduced in this regard²⁰. He prays that the splendour of the four-armed cross may influence the four elements of his being: č'oric's niwt'oc' imoys goyut'ean k'arat'ewid nšoyl azdesc'ē. Yovhannēs Ōjnec'i compares the four psalms at evening prayer, in accordance with his especial liturgical interests²¹.

The creation of these four principles did not occur in time. For "in the beginning" there was neither time nor place. Measurable time came into being on Day Four, with the creation of the sun and moon²². Vardan will discuss the explanation of days one to four later; first he

¹⁸ P. 29.

¹⁹ EZNIK, # 3; GEORGE OF PISIDIA, 1.339.

²⁰ NAREK, 65.2. For the *Teaching* and other similar theological parallels see THOMSON, "Number Symbolism".

²¹ Opera, p. 54. Nerses Snorhali draws a parallel between the four *tarerk* in the nature of the body and the four degrees of affinity within which marriage is prohibited, Tult'k', p. 63.

²² See below for the explanation of "days" one to four.

turns to God's creation of heaven and earth. Vardan starts with the three concentric spheres, kamark', which circle the earth: closest is that of air, then water, and farthest away is fire. There are biblical parallels to this. Isaiah, 40.22, had referred to heaven as a kamar [and á xoran]. And in Wisdom, 13.2, the idea that the circles of fire, wind, air, and water, and the stars are gods is attacked. But Vardan's three rings have their origin in secular texts such as the De Mundo [though this adds ether]²³. Eznik had attacked the idea, taking it as a misinterpretation of Paul's "third heaven²⁴. In his Geography Vardan calls these rings bolorakut'iwnk', "circles". But the concept rarely appears in Armenian texts. Išox combines the idea with the seven spheres which carry the seven planets; and it is those seven spheres which are found in most writers who deal with the physical universe²⁵.

The earth, surrounded by these three rings, is held in place by the upward blowing wind. Too heavy to fly up, the earth is prevented by this wind from falling down. There are parallels in the earliest Armenian writers. In the *Teaching* we read that the universe is suspended without wings as if in flight ²⁶. And Eznik notes that this is not contrary to scripture, for Job says that God set the earth on nothing: *i veray očnči*²⁷.

However, scripture is not consistent, for Psalm 74.4 refers to the columns which support the world, and Job [9.6] says: "God shakes from its foundations what is under heaven, and its pillars tremble". This theme is endorsed by the Yačaxapatum Čark' and Gregory of Narek 28. Basil in his Hexaemeron avoids taking these quotations too literally, preferring to think of the "power of God" as supporting the earth; he then adds with more enthusiasm the theory of the "scientists"

²³ Armenian text, p. 521.

²⁴ EZNIK, § 289; the refutation comes at § 378.

²⁵ Išox, p. 84. The seven spheres are discussed below. The terms kamar and xoran have numerous biblical parallels (Ps. 103.2; Job 38.38; Is. 40.22) and are used in the Teaching as similes for the visible heaven, e.g. § 259; cf. xoranajew in Grigoris Aršaruni, Hom. 3. Gregory of Narek, 75.10, likens the kamar of heaven to the church. The Armenian version of Basil's Hexaemeron (p. 23) changes the kamara of the Greek (rendered kamar in the Armenian version of Isaiah) to konk' gmbet'ard. Gmbet', "dome", does not appear in the Armenian bible. But Elišē, Questions, p. 27, interprets xoran as a "tent, as it were in the form of a dome — vran ibr t'e gmbet'ajew". For vran, cf. Ephrem, p. 4. Gndajew appears in George of Pisidia, 1.86.

^{26 § 355.}

²⁷ § 285; Job 26.7.

²⁸ Yačaxapatum, no. 22 (p. 233); NAREK, 63.2.

that the earth is in the middle of the universe, equidistant from all extremities, since all weighty bodies gravitate to the centre²⁹. George of Pisidia calls the column theory a "myth"; and Nersēs Šnorhali explicitly rejects it³⁰.

The very different conception found in Cosmas Indicopleustes that the universe is hexagonal, patterned on the tabernacle of the Old Testament³¹, does not seem to appear to be reflected in any original Armenian author. In his *Geography*, Vardan describes the earth [not the universe] as a cube, *kibikon*. And there is an interesting allusion to this idea in the Armenian version of the *Physiologus*. Describing the bee, the text notes that it fashions a cell [of a honeycomb] "like this hexagonal world — nman vec'ankiwni ašxarhis" ³².

Vardan now turns to the angels. He states: "When heaven came into being, it was given life with the fiery angels, as their region³³ is fiery". It is not clear whether heaven is in the outermost circle or beyond it. Vardan merely says: "Heaven is the upper veil between the angels and God"³⁴. An equally vague definition is found in Išox, who refers to heaven as a "ceiling [jetun]". That the angels are spirits of fire is a natural conclusion from Ps. 103.4: "Who maketh his angels spirits; his ministers a flaming fire". This is quoted in the Teaching and elaborated by Eznik ³⁵. [But Eznik has a problem, for the angels are incorporeal. So he claims that "corporeal" means "composed of four elements [i č'oric' hiwt'ic]", like men and animals. But to be incorporeal is to be of a simple nature [parz bnut'iwn], like angels, demons, and the souls of men.]

As for the angels themselves Vardan divides them into ten ranks. The later Mxit'ar Ayrivanec'i does the same, but when listing the ranks by name he gives the traditional nine ranks plus the twenty-four elders of the book of Revelation. Ten ranks is contrary to the universal earlier view that there are nine ranks of angels 36. These nine divisions are basic

²⁹ Hexaemeron, I 9-10. Cf. ROBBINS, p. 43. It is noteworthy that at III 4 of the Hexaemeron the reference to the columns is omitted in the Armenian version, p. 75.

³⁰ GEORGE, 1.129ff.; NERSES, p. 22.

³¹ For Cosmas see Wolska, La topographie chrétienne.

³² No. 36 [no. 37 in Marr's earlier edition]. VARDAN, Geography, p. 5.

³³ Region: gawar, as at Heb. 11.14.

³⁴ Veil: varagoyr. Cf. Išox, p. 76: Heaven is a "ceiling [jelun]", not a biblical term.

³⁵ Teaching, § 324, cf. 262; EZNIK, § 114.

³⁶ The nine divisions are elaborated in PSEUDO-DIONYSIUS, *Heavenly Hierarchy*; cf. EŁIŚĘ, *Questions*, p. 11, and NERSĘS ŚNORHALI, p. 30. For parallels between the nine ranks of angels

to the arguments of Pseudo-Dionysius, and they are acknowledged in all native Armenian writers. Many of them draw parallels with the nine ranks of the church hierarchy; and Smbat in his *Lawcode* extends this parallelism to the nine ranks of courtiers in the imperial palace at Constantinople. Even Vardan repeats the ninefold division in his *Geography*. The reason for his opinion in the *Chronicle* is obscure.

The six days of creation Vardan describes as six revolutions of heaven. Since the markers of time did not yet exist, one cannot talk about the "first" or "second" day. This is an important point, emphasized in the Syrian commentators, of whom Ephrem was particularly well known in Armenia, but also discussed in Greek writers³⁷. It is picked up by Anania of Širak, who points out that the day the world came into being is not called "first", but "day one". This he links to number theory, since one is the origin of multiplicity³⁸. Some commentators wondered how the first three days could be so reckoned. The *Questions* of Elišē, for example, fudges the issue by distinguishing light as such from the stars, and by supposing that light came upon the earth and then withdrew in three successive stages. This view has patristic origins³⁹. Ephrem interprets the first three days as a type of the three days that Christ was in the tomb before the resurrection ⁴⁰. But this does not seem to have had echoes in Armenian.

Vardan now proceeds to describe the successive stages of creation on each of the six revolutions, but he omits any reference to the seventh day of God's rest. The parallel of seven days with the six ages of the world, to be followed by a seventh age of rest, free of corruption and evil, was well known in Armenian. It had formed a major theme in the *Teaching*, and is echoed by many writers⁴¹. [The similar theory that this world would last seven ages, and that the eighth would be that of eternal rest, is echoed only in Anania of Širak.] But in his *Chronicle* Vardan passes over such speculations.

The creative power of God Vardan calls "nature". He says: "Now

and the nine ranks of the church hierarchy see UXTANES, ch. 63, MOVSES DASXURANC'I, II 48, and THOMSON, "The Armenian Version of Ps. Dionysius Areopagita".

- ³⁷ Levene, p. 73. For Greek thoughts on this problem see Alexandre, p. 100-101.
- 38 ANANIA, p. 239.
- ³⁹ Questions, p. 38; cf. p. 28-29. For patristic sources see ROBBINS, p. 49.
- ⁴⁰ Armenian text, p. 6.
- ⁴¹ References in Thomson, "Number Symbolism", under "Six" and "Seven". To those references to early writers add Išox, p. 95-96, who refers to the seven layers of skin and the seven doors of the ears; and Nerses Snorhall, p. 23, 27, for the seven ages.

philosophers say that in the first revolution of heaven came into being nature, which is the art [aruest] of God, the creative power after God, perhaps the energy [nergorcut'iwn] of the four elements". Earlier Vardan had called God a craftsman [aruestawor]; but here the personification of nature is directly reminiscent of the De Mundo, well known in its Armenian version. The theme is elaborated by Išox, whose work is entitled "Book concerning Nature, in general and particular". For him it is nature which gives life and creates the world. And nature is equated with art, the wisdom of God⁴². Parallels here with the traditions attributed to Hermes Trismegistus have already been noted by Mahé in his study on the Hermetic literature⁴³.

At the end of his description of the six stages of creation Vardan returns to this theme: "Nature moves the sphere of heaven", and: "According to Aristotle the general spirit gives existence to everything". But the concept of a hogi ěndhanur seems closer to the Timaeus of Plato than to the Pseudo-Aristotelian De Mundo.

On the second day — that is, for Vardan, the second revolution the firmament was established. Genesis, I 7, explains that the firmament divided the waters. The idea of the waters above the earth and the waters below is elaborated by early Armenian writers, such as Eznik and the Teaching⁴⁴. And the division is put to symbolic purpose by Grigoris Aršaruni, who uses it to contrast the spiritual and corporeal in various contexts⁴⁵. Vardan is more prosaic: the waters were divided for two reasons — to lighten the weight of the earth, and to protect corporeal creatures from the fire of heaven. The second reason has patristic origins⁴⁶. In a different context Vardan notes that mankind has already experienced the effects of the circle of fire, for the higher one goes the warmer it becomes. Describing the tower of Babel later in his Chronicle, he indicates that the higher the tower rose the hotter the air became, until men were burned and could build no further. Vardan's elaborate description of the building of the tower has its closest parallels with two foreign texts translated into Armenian before his

⁴² De Mundo, p. 530; Išox, p. 82, 85, 95.

⁴³ MAHÉ, *Hermès*, II, p. 348ff.

⁴⁴ Teaching, §§ 413-414; EZNIK, § 285; cf. EPHREM, p. 3-4.

⁴⁵ GRIGORIS, § 3.

⁴⁶ ROBBINS, p. 49. For the general exegesis of this question see also ALEXANDRE, p. 108-111.

time: the *Chronicle* of the Syrian patriarch Michael, and the adaptation of the Georgian *Chronicles*⁴⁷.

In the third revolution came into being the plants and trees. Vardan elaborates on Gen. 1.11-12. He states that the origin of plants is the mould of the earth [borbos holoyn], the origin of trees is moss [mamuin], and the most perfect specimen [katarumn] is the palm, for these are divided into male and female. The repute of the palm tree could be found in Basil's Hexaemeron; but the role of mould as generating plants does not seem to be found in Armenian before Išox⁴⁸. Vardan's comments are repeated by Mxit ar Ayrivanec'i⁴⁹.

On the fourth revolution came into being light. First Vardan notes that light is an offshoot [xzac] of the ether. This is not an idea of Basil's, who distinguishes light and the ether; it is closer to Ephrem's description of light as "an emanation without anything material [sp'ir tarac aranc' tarer ene'i] 50. The light is contained in vessels, as described by Eznik, Elišē, or Ephrem 51. It is interesting that the Armenian version of Basil's Hexaemeron uses the same term, where the Greek distinguishes light from its underlying sōma 52. This alteration does not occur in the Syriac intermediary, which has gušmā, rendering the Greek exactly.

The most important of the lights are the sun, moon, and the other seven stars, says Vardan. This is a strange remark, for the seven planets — which earlier authors describe as having each its own sphere to carry it ⁵³ — include the sun and moon. It is possible that the text is corrupt, for five and seven are easily confused when written as Armenian letters. The Armenian term for "sphere" varies considerably. In the *Chronicle* Vardan does not describe them, but his *Geography* refers to the seven gawti, a term used by Anania of Širak; in the *De Mundo*, the term is bolor, and in Basil's Hexaemeron, bolorak. Elišē in his Homilies refers to the seven parunak, which he likens to the seven gifts of the Spirit. In his Geography Vardan includes the sun and moon in the seven spheres, and

⁴⁷ THOMSON, "Vardan", p. 146-147.

⁴⁸ Hexaemeron, 47A; Išox, p. 90.

⁴⁹ MXIT'AR, p. 233.

⁵⁰ BASIL, 19A (p. 54); EPHREM, p. 5.

⁵¹ Aman in Eznik, §310, and Elišē, p. 166; anawt', in EPHREM, p. 5.

⁵² Hexaemeron, VI 3, 51E; p. 173 of the Armenian.

⁵³ De Mundo, p. 520, bolor; Hexaemeron, p. 72, bolorak; Anania, p. 325, gawti; ELIŠĒ, Homilies, p. 322, parunak [parallel to the seven gifts of the Spirit]. See also Vardan's Geography, 1.45, gawti.

adds the names by which "the Persians call them". Likewise, the names of the planets are given in the *De Mundo* immediately following the discussion of ether. Išox gives them the Arabic names, and Anania gives the Greek, Arabic, and Armenian⁵⁴.

With these lights time could first be marked. Vardan does not elaborate on the question of time, save that earlier he had said: "Time did not exist from the beginning". Much more important in Armenian than the marking of time — the days and years of Gen. 1.14 — was the interpretation of "signs [nšans]" in the same verse. As Question 32 in the text on Genesis attributed to Elišē asks: "What are we to understand by Moses saying about the stars that God made them to be for signs? Is what the astrologers say correct; and can the stars do this?". The answer given by Elišē is a definite "No", given at some length. For astrology was a continuing preoccupation of Armenian writers.

The early Armenian historians who describe the Iranian ruling classes, such as P'awstos, Eliše, or Movses Xorenac'i, all refer to the astrologers as a prominent and official group 55. In Armenia the proponents of astrology did not form an organized class, but their ideas are regularly attacked. The first to deal with the question was Eznik, who refutes the idea that the stars could influence births and deaths. In the homilies known as the Yačaxapatum Čark' it is emphasized that the stars do not indicate one's future fortunes or fate [baxt ew cnunds]. Elišē in the Questions attacks astrology, as does John Mandakuni in his homilies; and the same opposition is found in the translated texts of Basil and Nemesius. [However, this did not prevent the Armenians from translating Paul of Alexandria's Introduction to Astrology! 56. It is therefore rather surprising when Nerses Snorhali skirts around the issue in a mild fashion. In the poem "On Heaven" he states: "Although without life or reason, yet by their movement [the stars] have some influence. They do not have influence in themselves, but by the Word of him who created heaven"57. Vardan himself has no interest in the subject in his Chronicle, apart from stating that astrology [hmayut'iwn astelac derived from king Aloros — a passage taken from Michael the

⁵⁴ De Mundo, p. 520; IŠOX, p. 80ff.; ANANIA, p. 325.

⁵⁵ P'AWSTOS, IV 54; ELIŠĒ, History, p. 18; MOVSĒS XORENAC'I, On Fables, and II 70.

⁵⁶ EZNIK, §§ 216ff.; Yačaxapatum Čark', p. 233; ELIŠĒ, Questions, p. 33; Hexaemeron, VI 5; NEMESIUS, ch. 35ff. For Paul of Alexandria see the edition by BART'IKYAN in B.M., 12 [1977].

⁵⁷ P. 24.

Syrian's Chronicle⁵⁸. Earlier Armenian authors follow Greek tradition in deriving the more respectable astronomy from the Chaldaeans. As David the Invincible Philosopher explained: "Astronomy was invented by the Chaldaeans, since a cloudless and constantly clear sky enabled them easily to comprehend the movements of the heavenly bodies".

Vardan notes that the paths of the seven planets take them through the twelve signs of the zodiac. Some of these signs had been named by Eznik, and Anania lists them all ⁵⁹. With his customary enthusiasm for number symbolism, Grigoris Aršaruni links the twelve signs to other uses of twelve in the Old Testament ⁶⁰; but he offers no further details about the zodiac. In the *Homilies* attributed to Elišē the twelve apostles are regarded as healers of men who, in place of God, had gone astray after the twelve stars ⁶¹.

As the sun moves through the zodiac, explains Vardan, it moves higher and lower, thus causing the passage of the four seasons. The alternation of the seasons is likened by George of Pisidia to a dance, a figure that is prominent in the *De Mundo*⁶². But there, it is all the stars in their circular orbit which revolve in a solemn choral dance. The movement of the sun higher and lower means that the length of daylight varies, from the shortest day of four hours to the longest of twenty. Only in Lower India does the length of sunlight never vary: there is it always light for 12 hours and dark for twelve ⁶³. These matters are elaborated by Išox.

The inhabited world is divided into seven climes according to the philosophers, says Vardan. Išox names these philosophers Aristotle and Hermes ⁶⁴. He and Vardan agree that comparable to the seven climes are another seven in the world below the equator — but this is uninhabitable because of its being cold and dark. The Long Recension of the Ašxarhac ove while referring to the antichthon, does not describe

⁵⁸ VARDAN, p. 7. The earliest texts follow Greek tradition in deriving astrology from the Chaldaeans. The whole question of early Armenian ideas on astrology forms the subject of a separate study by the present author, and is not taken up here.

⁵⁹ Eznik, §§ 219ff.; Anania, p. 323.

⁶⁰ Cf. PHILO, In Ex., II 112ff.

⁶¹ See THOMSON, "Number Symbolism", s.v. "Twelve".

⁶² GEORGE OF PISIDIA, I, 290. Cf. *De Mundo*, 391b18, *parakic'k'* in the Armenian text, p. 519.

⁶³ This is described in greater detail by Išox, p. 78. See also Anania, p. 323-325.

⁶⁴ P. 78.

it as uninhabitable; but the shorter recension omits reference to this lower half of the earth.

Vardan does not elaborate on the seven climes. But it was an important theme in Išox, for the differences between the climes explain differences between different peoples 65. Those to the north, for example, are wilder and more passionate than those of the south, who because of their greater gentleness did not became eaters of meat. The best clime is that in the middle, Mesopotamia, where the inhabitants are not swarthy like the Indians, nor are they fair like the Sarmatians. Here they are wise and skilled and intelligent. Therefore it is more desirable then all lands of imperial kings; and for the same reason it has been the most often ravaged. One may suspect that Išox's origins may have influenced his views here. Later, Mxit'ar Ayrivanec'i makes nine divisions, or climes. Rather optimistically he adds that seven of these with 67 nations are Christian, while only two with four nations are not. He does not list these nations, and the total of 71 is rather odd. For the number 72 is the standard exegesis. It is first found in Armenian in the Teaching, but goes back to earlier interpretations of the number of languages that resulted from the scattering at the tower of Babel 66.

Vardan runs together the fifth and sixth days, which describe the creation of the animals in the seas, in the air, and on land. Beginning with the zoophytes and sponges, says Vardan, these living creatures culminate in man, the perfect being with rationality. As examples of the humblest aquatic creatures sponges appear in Basil and Nemesius⁶⁷; but Armenian writers are usually vague in their enumeration of species⁶⁸. There are 1,000 species, claims Vardan, whose leaders — or perhaps, the most significant of whom [glxaworawk' iwreanc] — are Leviathan in the waters and Behemoth on dry land in the desert. Neither of these names of animals occurs in the Armenian bible (or in the Greek); the Armenian renders Leviathan by višap and Behemoth by gazan. The two Hebrew names were used by the Syrian Ephrem in his commentary on Genesis; but the Armenian version of that is abbreviated,

⁶⁵ P. 94.

⁶⁶ MXIT'AR, p. 233; *Teaching*, §612 [but cf. §686 for the seventy apostles]. This and other early sources in Armenian, such as the translations of Eusebius' *Chronicle* and that of Hippolytus, describe the many nations who descended from Noah's three sons, but do not link them to the climes.

⁶⁷ Hexaemeron, VII 2, 64B (Arm. p. 223); NEMESIUS, ch. 1 (Arm. p. 13), quoting Aristotle.

⁶⁸ E.g. Yačaxapatum, Hom. 4; GRIGOR ARŠARUNI, Hom. 3.

and Leviathan and Behemoth do not seem to appear in Armenian before the tenth century. Leviathan is mentioned by Gregory of Narek, while both occur together in a homily by Nerses of Lambron 69. Grigor Aršaruni uses the biblical terms: višaps in the water and gazan on earth 70.

The fifth and sixth days of Genesis 1 refer only to the various kinds of created animals. Vardan adds a reference to plants and metallic substances — gold, silver, precious stones, and (more obscurely) "the other things which nature works through sulphur and mercury, as learned men say". This last phrase is very close to the description of minerals in Išox 71. The fourth homily in the Yačaxapatum Čark' refers to various metals and precious stones useful for mankind; and Łazar in his History offers a description of how plants are used for medicine, and minerals for adornment 72. But working with sulphur and mercury [ccmbov, žipakaw] does not occur in the early texts.

Finally, a new nature was wonderfully fashioned from heaven and earth — man, who combines physical and spiritual qualities. Vardan does not refer to the "image" of Gen. 1.26, but simply states that man is like the Trinity. That the three persons of the Trinity joined in creating man was standard exegesis of "let us make", and is found in the *Teaching* and later Armenian texts ⁷³. But Vardan combines this with the idea of man being created in the way a picture is painted. His terminology is quite extraordinary: "Like good portrait painters, since they begin from the feet, [God] wonderfully fashioned some new nature from heaven and earth and what is in between, six hands engaged in the forming of one picture". The Armenian bible renders the Greek *kat' eikona* [according to the image], by *i patker*, which could also mean "into a picture". But there seems to be no evidence in Armenian that painters began from the feet up ⁷⁴. Furthermore, Vardan refers to six hands. This description of the creation of man which involves Father,

⁶⁹ See the *NBHL* s.v. Leviathan is attested earlier in Gregory of Narek. The two names in the Syriac of EPHREM, p. 22-23, do not appear in the abbreviated Armenian rendering, p. 6-7.

⁷⁰ Hom. 3.

⁷¹ P. 82-83.

⁷² Yačaxapatum, p. 34; ŁAZAR, p. 9-10.

⁷³ § 263.

⁷⁴ The late Greek "Painter's Manual" has no explicit instructions in this regard. One would begin with an outline, then paint the garments, then the face. Cf. A.N. DIDRON, Manuel d'iconographie chrétienne, Paris, 1845, and P. HETHERINGTON, The "Painter's Manual" of Dionysius of Fourna, London, 1974.

Son, and Holy Ghost, each using both hands to paint a picture, is to my knowledge unique!

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